

# PATENT COOPERATION TREATY

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PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



REC'D 12 MAR 2004

WIPO PCT

Applicant's or agent's file reference P58876F-WO	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/GB 03/00906	International filing date (day/month/year) 04.03.2003	Priority date (day/month/year) 06.03.2002
International Patent Classification (IPC) or both national classification and IPC B01D15/08		
Applicant MOLECULARNATURE LIMITED et al.		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 5 sheets, including this cover sheet.  
  
☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  
  
 These annexes consist of a total of    sheets.

- This report contains indications relating to the following items:
  - I    ☒ Basis of the opinion
  - II   ☐ Priority
  - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - IV   ☐ Lack of unity of invention
  - V    ☒ Reasoned statement under Rule 66.2(a)(II) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI   ☐ Certain documents cited
  - VII ☐ Certain defects in the international application
  - VIII ☐ Certain observations on the international application

Date of submission of the demand  29.09.2003	Date of completion of this report  11.03.2004
Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer  Fourgeaud, D  Telephone No. +49 89 2399-7047  

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/GB 03/00906**

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-19 as originally filed

**Claims, Numbers**

1-28 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/GB 03/00906**

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**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes: Claims	all claims
	No: Claims	
Inventive step (IS)	Yes: Claims	all claims
	No: Claims	
Industrial applicability (IA)	Yes: Claims	all claims
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB03/00906

**Re Item I**

**Basis of the report**

The examination is being carried out on the **following application documents:**

Text for the Contracting States:

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PL PT RO SE SI  
SK TR

**Description, pages:**

1-19 as originally filed

**Claims, No.:**

1-28 as originally filed

Reference is made to the following documents:

- D1: WO 99 34810 A (COLLINS F WILLIAM ;SARR A BACHIR (CA); FIELDER DAVID A (CA); REDMO) 15 July 1999 (1999-07-15)
- D2: ABIDI S L: 'Chromatographic analysis of plant sterols in foods and vegetable oils' JOURNAL OF CHROMATOGRAPHY A, ELSEVIER SCIENCE, NL, vol. 935, no. 1-2, 23 November 2001 (2001-11-23), pages 173-201, XP004322070 ISSN: 0021-9673
- D3: JANOS P: 'Separation methods in the chemistry of humic substances' JOURNAL OF CHROMATOGRAPHY A, ELSEVIER SCIENCE, NL, vol. 983, no. 1-2, 3 January 2003 (2003-01-03), pages 1-18, XP004398944 ISSN: 0021-9673
- D4: EP-A-0 886 143 (SYNSORB BIOTECH INC) 23 December 1998 (1998-12-23)

**Re Item V**

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. The subject-matter of claim 1 of the present application concerns a method for monitoring the quality of a herbal medicine in which method
- a) a herbal medicine sample is provided
  - b) said sample is extracted with a polar solvent and a polar extract and a non polar residue are produced
  - c) the polar extract is characterized.

None of the documents of the available prior art discloses such a process.

2.1. In particular, D1 discloses a process for the isolation, recovery and purification of non-polar extractives. The subject-matter of claim 1, which is only concerned with polar extracts, is novel over this document.

Moreover, if in D1, for instance in example 5, the extraction of a rice bran with ethanol is disclosed, and further the non polar fraction obtained is characterized, it can be assumed that firstly rice bran does not fall within the scope of the expression "herbal medicine" used in present claim 1, and furthermore present claim 1 calls for the characterization of the polar extract, not of the non polar one.

2.2. The same applies to D2 which is concerned with the chromatographic analysis of plant sterols in foods and vegetable oil, i.e. non polar extracts.

2.3. D3 and D4 are less relevant for the subject-matter of claim 1.

2.4. Consequently, the subject-matter of claim 1 of the present application is novel over the prior art (Article 33(2) PCT).

3.1. The problem solved in the present application is that the quality i.e. the purity of a herbal medicine is monitored, allowing to produce a herbal medicine having a known quality.

There is no hint in the prior art how to realize such a monitoring of the quality of the herbal medicine.

The subject-matter of claim 1 involves an inventive step (Article 33(3) PCT).

3.2. The subject-matter of claims 27 and 28 are novel and inventive too.

3.3. The industrial applicability is evident from the foregoing.